

## REMARKS

In the above referenced Office Action the Examiner rejected Claims 1-12,16,18-20 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. In support of this rejection, the Examiner stated, "The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 calls for the at least one groove having a first predetermined size and the at least two grooves each having a second predetermined size which is larger than the first predetermined size; however, such subject matter was never disclosed in the originally filed disclosure. Page 7 of the specification makes a comparison between the "pins (8)" and "groove (2)" of the shank; however, there was no comparison between the "groove (2)" of the shank and the "grooves (16a,b;20a,b)" formed in the surface of the bore of the support block."

This rejection is believed to be obviated by the amendment to page 6 of the specification. Such amendment is clearly supported by Figure 1 of the drawings. Therefore, the Examiner is respectfully requested to withdraw his rejection of Claims 1-

12,16,18-20 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Next, the examiner rejected Claims 1, 6-12,16,18-20 under 35 U.S.C. 103(a) as being unpatentable over Krekeler '637 in view of Krekeler '206, stating "Krekeler '637 discloses a retaining system (see Fig. 4) for securing a cutting tool to a support block, said retaining system comprising: at least one groove (22) having a first predetermined shape, formed in an outer surface of a shank portion of said cutting tool intermediate each end thereof, said groove being formed in a direction transverse to a longitudinal axis of said shank; at least one groove (23) having a second predetermined shape, formed in a surface of a bore formed through an axis of said support block for receiving therein said shank portion of said cutting tool, said at least one groove formed in said outer surface of said shank portion of said cutting tool being substantially radially opposed to said at least one groove formed in said surface of said bore formed through said axis of said support block when said shank portion is inserted into said bore of said support block; and at least one rolled spring steel pin member (24) (see col. 4 lines 15- 25) engageable with each of said at least one groove formed in said outer surface of said shank portion said cutting tool and said at least one groove formed in said surface of said bore formed through said axis.

Krekeler '637 discloses the invention substantially as claimed. However, Krekeler '637 is silent about including at least two grooves and pins. Krekeler '206 teaches at least two grooves and pins (see Fig. 19, col. 10). It would have been considered obvious to one of ordinary skill in the art to modify Krekeler '637 to include at least two grooves and pins as taught by Krekeler '206 in order to more securely retain the tool within the holder. With regards to the limitation of the size of the shank's groove being smaller (see col. 20 line 5+ of Krekeler '206) than the size of the bore's groove, see Fig. 19 of Krekeler '206, wherein the vast majority of the pins (79,80) are within the bore grooves (77,78) which would make it larger than the shank's groove."

As amended Claim 1 now recites, "(a) at least one groove, having a first predetermined shape and a first predetermined size length, formed in an outer surface of a shank portion of said cutting tool intermediate each end thereof, said groove being formed in a direction transverse to a longitudinal axis of said shank;

(b) at least two grooves, each having a second predetermined shape and a second predetermined size length which is larger longer than said first predetermined size length thereby permitting rotation of said cutting tool in said support block,...". This feature is neither taught or suggested by this

reference or any of the other cited references. Therefore, the Examiner is respectfully requested to withdraw his rejection of Claims 1, 6-12,16,18-20 under 35 U.S.C. 103(a) as being unpatentable over Krekeler '637 in view of Krekeler '206

The Examiner also rejected Claims 1,6-12, 16,18-20 under 35 U.S.C. 103(a) as being unpatentable over Morrow (US 3498677). He stated, in support of his rejection, "Morrow discloses the claimed invention except for at least two pins in the grooves. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Morrow to include at least two pins, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179. With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 10 of Morrow, wherein the vast majority of the pin (74) is within the bore's groove (73) which would make it larger than the shank's groove(83)."

As discussed *supra*, as amended Claim 1 now recites, "(a) at least one groove, having a first predetermined shape and a first predetermined size length, formed in an outer surface of a shank portion of said cutting tool intermediate each end thereof, said groove being formed in a direction transverse to a longitudinal axis of said shank;

(b) at least two grooves, each having a second predetermined shape and a second predetermined size length which is larger longer than said first predetermined size length thereby permitting rotation of said cutting tool in said support block, ...". This feature is neither taught or suggested by this reference or any of the other cited references.

Therefore, the Examiner is respectfully requested to withdraw his rejection of Claims 1,6-12, 16,18-20 under 35 U.S.C. 103(a) as being unpatentable over Morrow (US 3498677).

Additionally, the Examiner rejected Claims 1,6-12, 16, 18-20 under 35 U.S.C. 1'03(a) as being unpatentable over Hansen et al. or Krekeler '764 or Kniff et al., Krekeler '359 or Vasek or Stewart (US 3268260, 3498677, 3622206, 3690728, 3796464, 3834764, 3841708, 3856359, 4222446, 5810102) in view of Krekeler '206. The Examiner commented in support of his rejection, "Hansen et al., Krekeler '764, Kniff et al., Krekeler '359, Vasek and Stewart all disclose a retaining system for securing a cutting tool to a support block. Hansen et al., Krekeler '764, Kniff et al., Krekeler '359, Vasek and Stewart all disclose the invention substantially as claimed. However, they are all silent about including at least two grooves and pins. Krekeler '206 teaches at least two grooves and pins (see Fig. 19, col. 10). It would have been considered obvious to one of ordinary skill in the art to modify either Hansen et al. or Krekeler '764 or Kniff

et al., Krekeler '359 or Vasek or Stewart to include at least two grooves and pins as taught by Krekeler '206 in order to more securely retain the tool within the holder. With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1 of Hansen et al., Fig. 24 of Krekeler '764, Fig. 3 of Kniff et al, Figs. 4-5 of Krekeler '359, Fig. 1 of Vasek, Fig. 2 of Stewart), wherein the vast majority of the pin(s) is within the bore's groove(s) which would make it larger than the shank's groove. With regards to the limitation of the size of the shank's groove being smaller (see col. 20 line 5+ of Krekeler'206) than the size of the bore's groove, see Fig. 19 of Krekeler '206, wherein the vast majority of the pins (79,80) are within the bore grooves (77,78) which would make it larger than the shank's groove."

As discussed supra, as amended Claim 1 now recites, "(a) at least one groove, having a first predetermined shape and a first predetermined size length, formed in an outer surface of a shank portion of said cutting tool intermediate each end thereof, said groove being formed in a direction transverse to a longitudinal axis of said shank;

(b) at least two grooves, each having a second predetermined shape and a second predetermined size length which is larger longer than said first predetermined size length thereby permitting rotation of said cutting tool in said support

block,..." . This feature is neither taught or suggested by these references or any of the other cited references.

Therefore, the Examiner is respectfully requested to withdraw his rejection of Claims 1,6-12, 16, 18-20 under 35 U.S.C. 1'03(a) as being unpatentable over Hansen et al. or Krekeler '764 or Kniff et al., Krekeler '359 or Vasek or Stewart (US 3268260, 3498677, 3622206, 3690728, 3796464, 3834764, 3841708, 3856359, 4222446, 5810102) in view of Krekeler '206.

Further, Claims 1,6-12,16,18-20 were rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. or Krekeler '764 or Kniff et al., Krekeler '359 or Vasek or Stewart (US 3268260, 3498677, 3622206, 3690728, 3796464, 3834764, 3841708, 3856359, 4222446, 5810102). He stated, "Hansen et al., Krekeler '764, Kniff et al., Krekeler '359, Vasek and Stewart all disclose the claimed invention except for at least two grooves and pins. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify either Hansen et al. or Krekeler '764 or Kniff et al., Krekeler '359 or Vasek or Stewart to include at least two grooves and pins, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1 of Hansen et al., Fig. 24 of Krekeler '764, Fig. 3 of Kniff et al., Figs. 4-5 of Krekeler '359, Fig. 1 of Vasek, Fig. 2 of Stewart), wherein the vast majority of the pin(s) is within the bore's groove(s) which would make it larger than the shank's groove."

As discussed supra, as amended Claim 1 now recites, "(a) at least one groove, having a first predetermined shape and a first predetermined size length, formed in an outer surface of a shank portion of said cutting tool intermediate each end thereof, said groove being formed in a direction transverse to a longitudinal axis of said shank;

(b) at least two grooves, each having a second predetermined shape and a second predetermined size length which is larger longer than said first predetermined size length thereby permitting rotation of said cutting tool in said support block,...". This feature is neither taught or suggested by these references or any of the other cited references.

Therefore, the Examiner is respectfully requested to withdraw his rejection of Claims 1,6-12,16,18-20 were rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. or Krekeler '764 or Kniff et al., Krekeler

'359 or Vasek or Stewart (US 3268260, 3498677, 3622206, 3690728, 3796464, 3834764, 3841708, 3856359, 4222446, 5810102).

Also, the Examiner rejected Claims 1, 3-12,16,18-20 under 35 U.S.C. 103(a) as being unpatentable over Bower, Jr. (US 3493268) in view of Krekeler '206, stating, "Bower, Jr. discloses the invention substantially as claimed (see Figures). However, Bower, Jr. is silent about including at least two grooves and pins. Krekeler '206 teaches at least two grooves and pins (see Fig. 19, col. 10). It would have been considered obvious to one of ordinary skill in the art to modify Bower, Jr. to include at least two grooves and pins as taught by Krekeler '206 in order to more securely retain the tool within the holder.

With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1 of Bower Jr., wherein the vast majority of the pin (6) is within the bore's groove (7) which would make it larger than the shank's groove. OR With regards to the limitation of the size of the shank's groove being smaller (see col. 20 line 5+ of Krekeler'206) than the size of the bore's groove, see Fig. 19 of Krekeler '206, wherein the vast majority of the pins (79,80) are within the bore grooves (77,78) which would make it larger than the shank's groove."

As discussed supra, as amended Claim 1 now recites, "(a) at

least one groove, having a first predetermined shape and a first predetermined size length, formed in an outer surface of a shank portion of said cutting tool intermediate each end thereof, said groove being formed in a direction transverse to a longitudinal axis of said shank;

(b) at least two grooves, each having a second predetermined shape and a second predetermined size length which is larger longer than said first predetermined size length thereby permitting rotation of said cutting tool in said support block, ...". This feature is neither taught or suggested by these references or any of the other cited references.

Therefore, the Examiner is respectfully requested to withdraw his rejection of Claims 1, 3-12,16,18-20 under 35 U.S.C. 103(a) as being unpatentable over Bower, Jr. (US 3493268) in view of Krekeler '206

Likewise, the Examiner rejected Claims 1, 3-12,16,18-20 under 35 U.S.C. 103(a) as being unpatentable over Bower, Jr. (US 3493268), stating, "Bower Ir. discloses the claimed invention except for at least two grooves and pins. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bower Ir. to include at least two grooves and pins, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With regards to the limitation of the size of the shank's groove being smaller than the size of the bore's groove, see Fig. 1, wherein the vast majority of the pin (6) is within bore's groove (7) which would make it larger than the shank's groove."

As discussed supra, as amended Claim 1 now recites, "(a) at least one groove, having a first predetermined shape and a first predetermined size length, formed in an outer surface of a shank portion of said cutting tool intermediate each end thereof, said groove being formed in a direction transverse to a longitudinal axis of said shank;

(b) at least two grooves, each having a second predetermined shape and a second predetermined size length which is larger longer than said first predetermined size length thereby permitting rotation of said cutting tool in said support block, ...". This feature is neither taught or suggested by these references or any of the other cited references.

Therefore, the Examiner is respectfully requested to withdraw his rejection of Claims 1, 3-12, 16, 18-20 under 35 U.S.C. 103(a) as being unpatentable over Bower, Jr. (US 3493268).

Lastly, the Examiner rejected Claims 1, 2-12, 16, 18-20 under 35 U.S.C. 103(a) as being unpatentable over Wipo document (WO 00/34626) in view of Krekeler '206 (US 3622206), stating, "Wipo '626 discloses the invention substantially as claimed (see

Figure 16). However, Wipo '626 is silent about including a groove in the shank of the cutting tool and at least two pins for the grooves (46). Krekeler '206 teach a groove in the shank of a cutting tool (see col. 20 line 5+) and at least two pins for two grooves (see Fig. 19, col. 10). It would have been considered obvious to one of ordinary skill in the art to modify Wipo '626 by including a groove in the tool's shank and at least two pins for the two grooves as taught by Krekeler '206 since this would facilitate insertion because the pin will contract to permit insertion and due to its resiliency property rebound to retain the cutting tool in its holder and more securely retain the tool within the holder.

With regards to the limitation of the size of the shank's groove being smaller (see col. 20 line 5+ of Krekeler '206) than the size of the bore's groove, see Fig. 19 of Krekeler '206, wherein the vast majority of the pins (79,80) are within the bore grooves (77,78) which would make it larger than the shank's groove."

As discussed supra, as amended Claim 1 now recites, "(a) at least one groove, having a first predetermined shape and a first predetermined size length, formed in an outer surface of a shank portion of said cutting tool intermediate each end thereof, said groove being formed in a direction transverse to a longitudinal axis of said shank;

(b) at least two grooves, each having a second predetermined shape and a second predetermined size length which is larger longer than said first predetermined size length thereby permitting rotation of said cutting tool in said support block, ...". This feature is neither taught or suggested by these references or any of the other cited references.

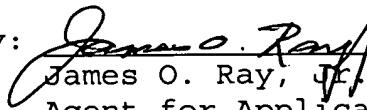
Therefore, the Examiner is respectfully requested to withdraw his rejection of Claims 1,2-12, 16, 18-20 under 35 U.S.C. 103(a) as being unpatentable over Wipo document (WO 00/34626) in view of Krekeler '206 (US 3622206).

Applicant notes the Examiner has used numerous references and multiple rejections in coming to the conclusion that this application is not patentable, which leads applicant to believe that he is not sure of his position.

In the event the Examiner has further difficulties with the allowance of the application, he is invited to contact the undersigned attorney by telephone at (412) 380-0725 to resolve any remaining questions or issues by interview and/or by Examiner's amendment as to any matter that will expedite the completion of the prosecution of the application.

Respectfully submitted,

By:

  
James O. Ray, Jr.  
Agent for Applicant  
Registration No. 27,666

JAMES RAY & ASSOCIATES  
2640 PITCAIRN ROAD  
MONROEVILLE, PA 15146

TELEPHONE: 412-380-0725  
FACSIMILE: 412-380-0748